

ENCEPHALITIS / INITIAL CASE REPORT FORM

PATIENT INFORMATION

Last Name _____ First Name _____ County _____
Address _____ City _____ Zipcode _____ State _____
Telephone-H (____) _____ - _____ W (____) _____ - _____ Date of Birth ____/____/____ Age _____
Occupation: _____ Race: ☐ White ☐ Black ☐ Am Indian/Alaskan ☐ Asian ☐ Other
Ethnicity: ☐ Hispanic ☐ Non-Hispanic ☐ Unknown Sex: ☐ Male ☐ Female Pregnant: ☐ Yes ☐ No ☐ Unknown

CLINICAL INFORMATION

Hospitalized? ☐ Yes ☐ No Hospital Name _____
Street Address _____ City _____ State _____ Zip _____
Medical record # _____ Date of admission ____/____/____ Date of discharge/transfer ____/____/____
Date of first symptoms ____/____/____ Date of first neurologic symptoms ____/____/____
Current Diagnosis: ☐ encephalitis ☐ meningoencephalitis ☐ meningitis ☐ other _____
Initial Diagnosis: ☐ encephalitis ☐ meningoencephalitis ☐ meningitis ☐ other _____
Fever ($\geq 38^{\circ}\text{C}$ or 100.4°F) ☐ Yes ☐ No ☐ Unknown Altered mental status ☐ Yes ☐ No ☐ Unknown
Headache ☐ Yes ☐ No ☐ Unknown Stiff neck/Meningeal signs ☐ Yes ☐ No ☐ Unknown
Seizures ☐ Yes ☐ No ☐ Unknown Muscle weakness ☐ Yes ☐ No ☐ Unknown
Altered immune status ☐ Yes ☐ No ☐ Unknown Previous Flavivirus vaccination ☐ Yes ☐ No ☐ Unknown
Rash ☐ Yes ☐ No ☐ Unknown If yes, describe _____
Other neurologic signs ☐ Yes ☐ No ☐ Unknown If yes, describe _____
Other symptoms (current or 1 month before onset) _____
Outcome ☐ Recovered ☐ Died ☐ Unknown If patient died, date of death ____/____/____

LABORATORY INFORMATION / TEST RESULTS

CSF (specify units) Date ____/____/____ Abnormal? ☐ Yes ☐ No ☐ Unknown
Glu _____ Prot _____ RBC _____ WBC _____ Diff: Segs _____% Lymphs _____%
Gram stain _____ Culture _____
CBC (specify units) Date ____/____/____ WBC _____ Diff: Segs _____% Lymphs _____%
MRI Date ____/____/____ Results _____
CT Date ____/____/____ Results _____
EEG Date ____/____/____ Results _____
Microbiology / serology Results _____

CURRENT TREATMENT

(antiviral or antibacterial) Type: _____ Date started: ____/____/____

RISK FACTOR INFORMATION (during 2 weeks before onset)

		<u>Location</u>	<u>Dates</u>
Travel outside USA?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	_____	_____
Travel outside Virginia?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	_____	_____
Travel outside county of residence?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	_____	_____
Animal or arthropod contact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	_____	_____
If yes specify species: _____			
Blood donor?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		

If yes, contact the VDH Office of Epidemiology immediately

Blood transfusion or organ transplant (during 1 month before onset)? ☐ Yes ☐ No ☐ Unk

If yes, contact the VDH Office of Epidemiology immediately

SPECIMENS BEING SUBMITTED TO LAB FOR TESTING

Name of Lab _____ CSF ☐ Yes ☐ No If yes, date collected ____/____/____ ☐ Initial ☐ Repeat
If no, was a lumbar puncture performed? ☐ Yes ☐ No
Name of Lab _____ Serum ☐ Yes ☐ No If yes, date collected ____/____/____ ☐ Initial ☐ Repeat
Name of Lab _____ Other _____ Date collected ____/____/____ ☐ Initial ☐ Repeat

PHYSICIAN

Last name _____ First name _____
Work address _____ City _____ State _____ Zip Code _____
Telephone (____) _____ - _____ Pager (____) _____ - _____

SUBMITTER

Name _____
Address _____

Phone (____) _____ - _____

Date of Report: ____/____/____

Form ENC-1

Revised December 2002

Division of Consolidated Laboratory Services (DCLS) - Arbovirus Testing

Testing Criteria for Encephalitis: Any adult or pediatric patient admitted to a hospital with a presumed diagnosis of viral encephalitis, or with focal CNS findings and fever should submit a whole blood or serum sample for diagnostic testing at DCLS following the guidelines listed below. **Recommended Criteria for Suspect Cases of WNV** - Any patient with viral encephalitis (Criteria a, b and c below) with or without associated muscle weakness (Criteria d)

- a. Fever $\geq 38^{\circ}\text{C}$ or 100°F , and
- b. Altered mental status (altered level of consciousness, agitation, lethargy) and/or other evidence of cortical involvement (e.g., focal neurologic findings, seizures), and
- c. CSF pleocytosis with predominant lymphocytes and/or elevated protein and a negative gram stain and culture, and/or
- d. Muscle weakness (especially flaccid paralysis) confirmed by neurologic exam or by EMG.

Testing Systems Employed: Serological specimens submitted for arbovirus testing will be evaluated using an IgM Antibody Capture Enzyme-linked Immunosorbent Assay (MAC-ELISA) and an IgG ELISA to identify St. Louis Encephalitis (SLE), Eastern Equine Encephalitis (EEE), LaCrosse Encephalitis (LAC), and WNV -reactive antibody. If SLE, EEE, LAC, or WNV-reactive antibodies are present, specimens will be forwarded to CDC for Plaque Reduction Neutralization Testing (PRNT) confirmation. Real-time RT-PCR will be performed on biopsy and postmortem tissue specimens, and acute serum and CSF. Viral isolation is available upon request.

Specimen Types and Amounts:

Specimen	Test	Specimen volume	Shipment
Paired acute-phase (0-8 days post-onset of illness) and convalescent-phase (14-21 days after acute specimen) sera	MAC-ELISA IgG ELISA	2 ml sera in plastic tube (preferred) or 5 ml whole coagulated blood	Refrigerated
Acute-phase CSF	MAC-ELISA Viral Isolation Real-time RT-PCR	1.0 ml in plastic tube	Frozen
Brain, biopsy or postmortem tissue	Viral Isolation Real-time RT-PCR	1 gram	Frozen

Submission Form: Include a Encephalitis/Initial Case Report Form for each patient to be tested. Fill out the form as completely as possible. Accurate interpretation of serologic findings requires knowledge of the specimen. It is imperative that the following data accompany specimens submitted: 1) symptom onset date; 2) date of sample collection; 3) unusual immunological status of patient; 4) current address and travel history; 5) history of prior vaccination against flavivirus disease; and 6) brief clinical summary including suspected diagnosis.

Packaging for Shipment:

Serum or whole coagulated blood samples: If you are requesting serology, the specimen should be kept cool but there is no need to keep it frozen. Wrap your specimen in absorbent material, pack it in a sealable plastic bag, place the bag in a rigid container (styrofoam box or cardboard mailing container), place the container and a cold pack in a styrofoam cooler for shipment.

CSF or tissue: If you are requesting virus isolation or Real-time RT-PCR for WNV on tissue or CSF, the specimen should be frozen in a sterile container prior to shipment and it should be sent on enough dry ice to insure it will remain frozen until receipt. These specimens should be wrapped in absorbent material, packed in a sealable plastic bag, placed in a second sealable bag, and then placed in a cooler with dry ice for shipment.

Coolers should be shipped 24 hour/overnight delivery.

If you are hand carrying the specimen, please observe the packing instructions above to secure the specimen in transit.

Sample Shipment:

Non-courier shipment:

Package specimens as indicated above and send to DCLS using the following address:

Division of Consolidated Laboratory Services
1 North 14th Street, SRM Room 151
Richmond, Virginia 23219-3691

Courier shipment:

Package specimens as indicated above and send via DCLS courier.

Reporting of Test Results: Test results are normally available 10 days to 2 weeks after receipt of specimens. During periods of heavy submission, turn around times may be longer. Receipt of a hard copy of the results may take 2 weeks after completion of testing. If initial screening tests are positive, results will be communicated to Dr. Suzanne Jenkins prior to the availability of confirmatory test results. Confirmatory testing performed on screen positive samples will delay the reporting of results to the submitter.

Please contact Denise Pettit (804-786-9715) at DCLS if you have questions regarding sample collection or shipment.